

APPENDIX A

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CLAIMS OF UNITED STATES PATENT NO. 8,893,971

We claim:

1. A method for using a ballistics calculator to generate aiming information, said ballistics calculator comprising a processor, a display screen, and a ballistics computer program on a computer readable medium, said method comprising:

a) inputting information into said ballistics calculator regarding a target acquisition device, said target acquisition device comprising a reticle, said reticle comprising:

i) a primary horizontal cross-hair;

ii) a primary vertical cross-hair that intersects said primary horizontal cross-hair;

iii) two or more vertical lead markings upon said primary horizontal cross-hair;

iv) two or more horizontal line rangefinder markings above said vertical lead markings to the left of said primary vertical cross-hair and two or more horizontal line rangefinder markings above said vertical lead markings to the right of said primary vertical cross-hair;

v) two or more evenly spaced simultaneously visible straight line secondary horizontal cross-hairs on said primary vertical cross-hair below said primary horizontal cross-hair; and

vi) two or more simultaneously visible straight line secondary vertical cross-hairs on said simultaneously visible straight line secondary horizontal cross-hairs below said primary horizontal cross-hair, wherein an intersection of at least one of said two or more simultaneously visible straight line secondary vertical cross-hairs and at least one of said two or more simultaneously visible straight line secondary horizontal cross-hairs provides an aiming point;

b) inputting information into said ballistics calculator regarding one or more of:

i) external conditions;

ii) a projectile;

iii) a relation of a shooter and a target; and

iv) a ballistics drag model and ballistic coefficient;

c) calculating aiming information from said information regarding the target acquisition device and said information regarding one or more of external conditions, a projectile, a relation of a

1 shooter and a target, and a ballistics drag model and ballistic coefficient by running said ballistics
2 computer program on said processor; and

3 d) displaying said aiming information on said display.

4 2. The method of claim 1, wherein said reticle is as shown in FIGS. 54a to 54q.

5 3. The method of claim 1, wherein said reticle is as shown in FIG. 54r.

6 4. The method of claim 1, wherein said reticle is as shown in FIG. 54s.

7 5. The method of claim 4, wherein said range indicates one or more said secondary horizontal
8 cross-hairs for elevation correction.

9 6. The method of claim 1, wherein a fit between a dimension of an image of an object of known
10 size within a predetermined distance of one or more said horizontal line rangefinder markings
11 above said primary horizontal cross-hair provides a range to said object.

12 7. The method of claim 1, wherein said primary horizontal cross-hair is an interrupted straight
13 line and wherein said primary vertical cross-hair is an interrupted straight line, further comprising
14 an aiming dot at an interrupted intersection of said primary horizontal cross-hair and said primary
15 vertical cross-hair.

16 8. The method of claim 1, wherein two or more of said horizontal line rangefinder markings are
17 of unequal distance above said primary horizontal cross hair, and two or more of said horizontal
18 line rangefinder markings are of equal distance above said primary horizontal cross-hair.

19 9. The method of claim 1, wherein said aiming information comprises a number of clicks an
20 elevation knob and a windage knob on a scope comprising said reticle should be turned to adjust a
21 position of said target acquisition device relative to a firearm.

22 10. The method of claim 1, wherein said displaying comprises displaying an image of said reticle
23 on said display.

24 11. The method of claim 10, further comprising displaying said aiming information as an aiming
25 point on said image of said reticle on said display.

26 12. The method of claim 1, wherein said ballistics calculator comprises a Global Position System
27 (GPS) device.

28 13. The method of claim 1, wherein said ballistics calculator is a telephone.